

50X1-HUM

Organization and Operation  
of  
Interurban Telephone Communications

Organizatsiya i Eksploatatsiya  
Mezhdugorodnoy Svyazi  
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In 1922, the experiments with V. I. Kovalenkov's method of the high frequency transmission of telephone conversations yielded very good results. Soviet specialists further developed this method and made telephone conversations at distances of 5000 kilometers possible. High frequencies have been widely used for telephone communications, and 12 conversations can be transmitted simultaneously via overhead wires or underground cables. The development of a special concentric cable has made the simultaneous transmission of 240 or more conversations possible. As a result of the Five-Year Plans, an inter-urban network has been created which includes Moscow and all the oblast centers. The 1946-50 plan called for restoration of war damage and the organization of dependable telegraph and telephone communications between Moscow and all the centers of the republics, krays, and oblasts, as well as between the republic capital and the republic oblast centers. This plan is being carried out by installing cables and by enlarging the existing network of overhead wires. The plan includes restoring and installing anew 7000 kilometers of trunk telegraph and telephone cables and 50,000 kilometers of overhead wires made of non-ferrous metals.

The fulfillment of the plan during the first three years of the post war Five-Year Plan has resulted in the creation of hundreds of new telephone communication channels through the introduction

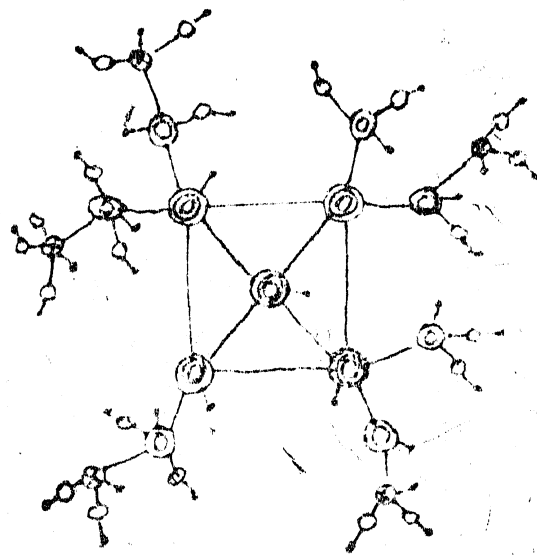
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of multi-channel systems of high frequency; new trunk cable lines have also been put into operation; new interurban telephone exchanges were established in Leningrad, Rostov on Don, Stalingrad and other cities. Measures are being taken to replace the order system with an immediate system; exchanges combining both systems are already under construction.

The interurban telephone network of the USSR is constructed according to a four-stage system. (See sketch). It consists of the main centers (GU), Oblast centers (OU), inter-rayon centers (MRU) and rayon centers (RU). The whole territory of the USSR is divided into zones each having a main center. The main centers are directly connected with each other. Each zone has oblast centers which are connected with the zone's main center and some of them are connected with each other. The main centers, <sup>and</sup> oblast centers together with the network connecting them form the trunk telephone network of the USSR. Rayon centers which are located far away from the oblast centers are usually connected with the inter-rayon centers. The inter-rayon centers are directly connected with the oblast center. Rayon centers located near the oblast centers are also directly connected. The inter-rayon and rayon centers together with their networks and connections with the oblast center are known as intra-oblast inter-urban telephone network.

Sketch  
showing four-stage inter-urban telephone  
network



⊙ GU ⊙ GU ⊙ MRU ⊙ RU • GTS